WHAT IS CLAIMED IS:

1. A method of fabricating a semiconductor structure, comprising:

establishing a non-stoichiometry associated with a dielectric layer, the non-stoichiometry associated with a degree, the degree of the non-stoichiometry corresponding to a nitrogen profile associated with the dielectric layer;

controlling deposition of the dielectric layer outwardly from a substrate to substantially yield the established non-stoichiometry of the dielectric layer; and

incorporating nitrogen into the dielectric layer to substantially yield the nitrogen profile corresponding to the established non-stoichiometry.

2. The method of Claim 1, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises:

determining a proportion of silicon relative to oxygen of the dielectric layer, the proportion corresponding to the established non-stoichiometry; and

depositing the dielectric having the determined proportion of silicon relative to oxygen.

3. The method of Claim 1, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises:

determining a proportion of silicon relative to oxygen of the dielectric layer, the proportion corresponding to the established non-stoichiometry; and

exposing the substrate to a gas flow comprising a precursor and an oxidizer to deposit the dielectric layer having the determined proportion of silicon relative to oxygen.

4. The method of Claim 1, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate; and

oxidizing the silicon.

5. The method of Claim 1, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate during a first pulse having a first duration; and

oxidizing the silicon during a second pulse having a second duration, the first duration and the second duration corresponding to the predetermined proportion.

6. The method of Claim 1, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate during a first number of pulses; and

oxidizing the silicon during a second number of pulses, the first number of pulses and the second number of pulses corresponding to the predetermined proportion.

7. The method of Claim 1, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a thickness and a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate using a first gas flow, the first gas flow associated with a silicon concentration, a first gas flow rate, and a first gas pressure; and

oxidizing the silicon using a second gas flow, the second gas flow associated with an oxidizer concentration, a second gas flow rate, and a second gas pressure; the silicon concentration, the first gas flow rate, the first gas pressure, the oxidizer concentration, the second gas flow rate, and the second gas pressure corresponding to the predetermined proportion.

8. The method of Claim 1, wherein establishing the non-stoichiometry associated with the dielectric layer further comprises calculating a proportion of silicon relative to oxygen of the dielectric layer corresponding to the established non-stoichiometry.

9. The method of Claim 1, wherein the dielectric layer has a thickness in the range of one monolayer to fifty Angstroms.

10. The method of Claim 1, wherein the dielectric layer has a thickness in the range of one monolayer to twenty Angstroms.

11. A method of fabricating a semiconductor structure, comprising:

establishing a nitrogen profile associated with a dielectric layer;

controlling deposition of the dielectric layer outwardly from a substrate to substantially yield a non-stoichiometry of the dielectric layer, the non-stoichiometry associated with a degree, the degree of the non-stoichiometry corresponding to the established nitrogen profile; and

incorporating nitrogen into the dielectric layer to substantially yield the established nitrogen profile.

12. The method of Claim 11, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises:

determining a proportion of silicon relative to oxygen of the dielectric layer, the proportion corresponding to the non-stoichiometry; and

depositing the dielectric having the determined proportion of silicon relative to oxygen.

13. The method of Claim 11, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises:

determining a proportion of silicon relative to oxygen of the dielectric layer, the proportion corresponding to the non-stoichiometry; and

exposing the substrate to a gas flow comprising a silicon precursor and an oxidizer to deposit the dielectric layer having the determined proportion of silicon relative to oxygen.

14. The method of Claim 11, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate; and

oxidizing the silicon.

15. The method of Claim 11, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate during a first pulse having a first duration; and

oxidizing the silicon during a second pulse having a second duration, the first duration and the second duration corresponding to the predetermined proportion.

16. The method of Claim 11, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a thickness and a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate during a first number of pulses; and

oxidizing the silicon during a second number of pulses, the first number of pulses and the second number of pulses corresponding to the predetermined proportion.

17. The method of Claim 11, wherein controlling deposition of the dielectric layer outwardly from the substrate further comprises repeating the following until the dielectric layer having a predetermined proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate using a first gas flow, the first gas flow associated with a silicon concentration, a first gas flow rate, and a first gas pressure; and

oxidizing the silicon using a second gas flow, the second gas flow associated with an oxidizer concentration, a second gas flow rate, and a second gas pressure; the silicon concentration, the first gas flow rate, the first gas pressure, the oxidizer concentration, the second gas flow rate, and the second gas pressure corresponding to the predetermined proportion.

18. The method of Claim 11, further comprising calculating a proportion of silicon relative to oxygen of the dielectric layer corresponding to established nitrogen profile.

19. A system of fabricating a semiconductor structure, comprising:

means for establishing a non-stoichiometry associated with a dielectric layer, the non-stoichiometry associated with a degree, the degree of the non-stoichiometry corresponding to a nitrogen profile associated with the dielectric layer;

means for controlling deposition of the dielectric layer outwardly from a substrate to substantially yield the established non-stoichiometry of the dielectric layer; and

means for incorporating nitrogen into the dielectric layer to substantially yield the nitrogen profile corresponding to the established degree of non-stoichiometry.

20. A method of fabricating a semiconductor structure, comprising:

establishing a non-stoichiometry associated with a dielectric layer by calculating a proportion of silicon relative to oxygen of the dielectric layer corresponding to the established non-stoichiometry, the non-stoichiometry associated with a degree, the degree of the non-stoichiometry corresponding to a nitrogen profile associated with the dielectric layer;

controlling deposition of the dielectric layer outwardly from a substrate to substantially yield the established non-stoichiometry of the dielectric layer, the dielectric layer having a thickness in the range of one monolayer to thirty Angstroms, the deposition of the dielectric layer controlled by depositing the dielectric having the determined proportion of silicon relative to oxygen by at least one of the following processes:

exposing the substrate to a gas flow comprising a silicon precursor and an oxidizer according to a first process to deposit the dielectric layer having the determined proportion of silicon relative to oxygen; and

repeating at least one of the following according to a second process until the dielectric layer having the proportion of silicon relative to oxygen is formed:

depositing silicon outwardly from the substrate during a first pulse having a first duration, and oxidizing the silicon during a second pulse having a second duration, the first duration and the second duration corresponding to the predetermined proportion;

depositing silicon outwardly from the substrate during a first number of pulses, and oxidizing

the silicon during a second number of pulses, the first number of pulses and the second number of pulses corresponding to the predetermined proportion; and

depositing silicon outwardly from the substrate using a first gas flow, the first gas flow associated with a silicon concentration, a first gas flow rate, and a first gas pressure, and oxidizing the silicon using a second gas flow, the second gas flow associated with an oxidizer concentration, a second gas flow rate, and a second gas pressure; the silicon concentration, the first gas flow rate, the first gas pressure, the oxidizer concentration, the second gas flow rate, and the second gas pressure corresponding to the predetermined proportion; and

incorporating nitrogen into the dielectric layer to substantially yield the nitrogen profile corresponding to the established degree of non-stoichiometry.